

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROP. FY
QSS Group, Inc.	NAS5- 99124 125 125 125 TASK NO. AMENDMENT	562-146-10-03-89	99

TASK TITLE: (NTE 80 characters; include Project name)

Radiation Effects Testing and Analysis Software Services

APPROVALS: (Type or print name and sign)

ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR)

Kenneth A. LaBel <i>[Signature]</i>	DATE 8-15-99	ORG CODE 562	MAIL CODE 562.1	PHONE 301-286-9936
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BRANCH HEAD

Arthur R. Obenschain (acting) <i>[Signature]</i>	DATE 8-20-99	CODE 562	PHONE 301-286-5118
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CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

Robert S. Lebar <i>[Signature]</i>	DATE 8/20/99	CODE 560	PHONE 301-286-6588
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FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE

CONTRACTING OFFICER'S QUALITY REP:

DESIGNATED FAM:

(IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)

☒ NO ☐ YES

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)

C.O. Requested Quote on:

Date: AUG 23 1999

Contractor will develop specification or statement of work under this task for a future procurement. ☒ NO ☐ YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. ☐ NO ☐ YES ☒ N/A

Government Furnished Property/Facilities: ☐ NO ☒ YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: ☐ NO ☒ YES If yes: ☒ TOTAL ☐ PARTIAL
If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: ☒ NO ☐ YES

Highlighted Contract Clauses: (to be completed by Contracting Officer)

Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be October 1, 1999.

INCENTIVE FEE STRUCTURE (check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	No. 1	No. 2	<u>X</u> No. 3	No. 4	No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

(To be completed by Contracting Officer)

The target cost of this task order is \$ 212,175.

The target fee of this task order is \$ 13,594.

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 225,769.

The maximum fee is \$ 19,868.

The minimum fee is \$0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

[Signature]
SIGNATURE OF CONTRACTING OFFICER

10/29/99
DATE

Lorrie L. Eakin
Contracting Officer

TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE

DATE

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QSS Group, Inc.	NAS5- 99124	125	

Applicable paragraphs from contract Statement of Work: Function 2D8

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

(This is a follow-on to Task 42 under this contract. Task start date is 10/1/99.)

The requirements is to provide services to the Radiation Effects and Analysis (REA) Group of the Component Technologies and Radiation Effects Branch (Code 562). The radiation effects of concern are total ionizing dose (TID), displacement damage (DD), and single event effects (SEE).

The contractor shall provide services to the REA in the design and development of software as follows:

1. Design and development of test suite software compatible with existing VXI test equipment or with standalone RH21020-based test setup for radiation effects testing. This may include participation at test sites.
2. Design and development of software front-end for use with remote-controlled 3-axis with one degree of rotation stage used for radiation testing at remote test sites.
3. Design and development of software for radiation/technology flight experiments.
4. Curator capabilities for maintenance and periodic upgrades to the REA's website including database development and maintenance, graphical interfaces, and associated information dissemination efforts. This includes both Java and Html coding.
5. Ground-system software for the analysis of flight engineering telemetry and flight radiation/technology experiments. This includes interfacing with national and international organizations to work issues such as telemetry formats.
6. Database development and management of the REA radiation effects test data. This includes reducing raw data to processed data and graphics.
7. General REA services in the area of developing graphics, schedules, and reports for delivery to REA sponsors its partners.

GFE is PCs and software tools for code development and website maintenance.

Performance of radiation tests may take place onsite (i.e., GSFC's Co-60 source) or offsite (i.e., Brookhaven National Labs or University of California at Davis). Radiation safety certification is required.

PERFORMANCE SPECIFICATIONS:

Analyses of flight shall provide experiment/engineering background and full analysis of events observed during radiation experiments.

Software deliverables shall include documented and functioning code as well as source code. Documentation shall be in accordance with industry standard practice.

Website performance shall be based on completeness of information, ease of use, and meeting of ITAR restrictions.

APPLICABLE DOCUMENTS:

None.

TASK END DATE: 9/30/00

MILESTONES/DELIVERABLES AND DATES:

Analysis of radiation experiments: 2 weeks following test completion

Website:	Initial structuring of site layout, ERC Projec	12/30/99
	Maintenance and data entry of websites	periodic
Reports:	Quarterly reports to Defense Threat Reduction Agency and NASA Electronic Parts and Packaging Program	12/15/99, 3/15/00, 6/15/00, 9/15/00
	Flight experiment data analysis lessons learned - I	1/15/00
Software:	Upgrade of tester code	11/15/99
	Motion controller code - phase 2	11/15/99
	Initial design for STRV-1d telemetry system	12/1/99
	Demonstration of STRV-1d system	1/1/00
Data Analysis:	MPTB f/o experiment updates	10/30/99, 3/1/00, 7/1/00
	STRV-1d experiment data analysis	TBD pending launch (Q2 FY00)
Misc.	Presentation preparation for and technical services at SEE Symposium	4/15/00
	Technical services for ERC presentations and conferences	11/15/99, 3/15/99, 5/15/99
	Technical paper co-author for and services at IEEE NSREC	7/10/99

PERFORMANCE STANDARDS:

- Schedule:** On-time delivery/completion of the above milestones/deliverables
- Technical:** ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Kenneth A. LaBel, building 11, room E208B